



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,232	04/15/2002	James Frederick Morris	HODG-101 451145-0002	6321

7590 03/25/2004
R Thomas Payne
Cummings & Lockwood
PO Box 1960
New Haven, CT 06509-1960

EXAMINER

PREVIL, DANIEL

ART UNIT PAPER NUMBER

2636

DATE MAILED: 03/25/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,232

Applicant(s)

MORRIS, JAMES FREDERICK

Examiner

Daniel Previl

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2002.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-6 are objected to because of the following informalities: claim 1, line 10, and delete "the" before underlying. Appropriate correction is required.

Claims 2-6 are objected for the same reason since they depend from an objected claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gemmer (4,941,770) in view of Gebert et al. (US 5,008,666).

Regarding claim 1, Gemmer discloses an electromagnetic traffic measurement which includes one or more electromagnetic induction loops (determine traffic density embedding copper wires as induction loops) (abstract) comprising: a pre-formed insulated electrically conducting material in one or a plurality of interconnected loops of a predetermined configuration (induction loop 10 is placed on the road surface 11 for each lane 4-9, each induction loop is sealed with a protective covering 14) (fig. 1; col. 4, lines 14-18 and lines 30-35); encapsulated in an outer layer

(conductor layer 15) adapted for adhesion to a road as a complete composite loop configuration prior to application of a covering surface layer to the road (conductor layer 15 is subsequently sealed with a plastic material as protective covering 14) (fig. 3; col. 4, lines 47-50); wherein the outer layer (conductor 15) comprises a bitumen impregnated geotextile base bandage adapted to support one or a plurality of insulated electrically conducting wires or cables (conductor layer 15 is applied directly on the road surface 11 with surface 11 which filled with asphalt 17 then hold connecting pieces 19 in their work position) (col. 4, lines 53-68); an overlying adhesion bandage for securing the encapsulated loop to the underlying pavement base (carrier layer 13 is secured the encapsulated loop 10 to the underlying pavement base 55) (fig. 3).

Gemmer discloses all the limitation above but fails to explicitly disclose an upper encapsulation tape.

However, Gebert discloses an upper encapsulated tape (a covering plate may be provided on the top surface) (fig. 1, fig. 5; col. 9, lines 7-16; col. 8, lines 48-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Gebert in Gemmer. Doing so would easily installed the encapsulation tape on top of the loop to secure efficiently the assembly to preclude damage to the loop wherein users can acquire peace of mind when using this system because not only it is a weather resistant but also a cross-wise sensitivity

and a good general signal to noise ration as taught by Gebert (col. 2, lines 60-64)

Regarding claim 2, Gemmer discloses an electromagnetic traffic measurement operatively connected to traffic monitoring or to traffic control or regulating means (col. 1, lines 14-30).

Regarding claim 3, Gemmer discloses an electromagnetic traffic measurement operatively connected to traffic signals or to a gate control (col. 1, lines 14-18).

Regarding claim 4, Gemmer discloses an electromagnetic traffic measurement wherein the pre-formed composite loop is provided in ready-to-use form for attachment to a road pavement base (fig. 3; col. 4, lines 14-23).

Regarding claim 5, Gemmer discloses an electromagnetic traffic measurement wherein a pre-formed encapsulated electromagnetic induction loop is attached to a road in a predetermined configuration, the loop is operatively connected to traffic control or regulating means and a surface layer of asphalt or other pavement surfacing material is applied to the road or pavement base to cover and seal the loop within the road the road or pavement (fig. 3, col. 47-68).

Regarding claim 6, Gemmer discloses the encapsulated electromagnetic induction loop is attached to the top layer of reinforcing steel mesh in the road pavement base before being overlaid with asphalt or other pavement surfacing material (loop 10 is attached to the top layer 15) (fig. 3; col. 4, lines 47-68).

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gemmer (US 4,941,770) in view of Gebert et al. (US 5,008,66).

Regarding claim 7, Gemmer discloses an electromagnetic traffic measurement which includes one or more electromagnetic induction loops (determine traffic density embedding copper wires as induction loops) (abstract) comprising: a pre-formed insulated electrically conducting material in one or a plurality of interconnected loops of a predetermined configuration (induction loop 10 is placed on the road surface 11 for each lane 4-9, each induction loop is sealed with a protective covering 14) (fig. 1; col. 4, lines 14-18 and lines 30-35); encapsulated in an outer layer (conductor layer 15) adapted for attachment to a road wherein one or more electromagnetic induction loops is operatively connected to traffic monitoring or to traffic control or regulating means (fig. 6; col. 4, lines 14-50); wherein the outer layer (conductor 15) comprises a bitumen impregnated geotextile base bandage adapted to support one or a plurality of insulated electrically conducting wires or cables (conductor layer 15 is applied directly on the road surface 11 with surface 11 which filled with asphalt 17 then hold connecting pieces 19 in their work position) (col. 4, lines 53-68); an overlying adhesion bandage for securing the encapsulated loop to the underlying pavement base (carrier layer 13 is secured the encapsulated loop 10 to the underlying pavement base 55) (fig. 3).

Gemmer discloses all the limitation above but fails to explicitly disclose an upper encapsulation tape.

However, Gebert discloses an upper encapsulated tape (a covering plate may be provided on the top surface) (fig. 1, fig. 5; col. 9, lines 7-16; col. 8, lines 48-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Gebert in Gemmer. Doing so would easily installed the encapsulation tape on top of the loop to secure efficiently the assembly to preclude damage to the loop wherein users can acquire peace of mind when using this system because not only it is a weather resistant but also a cross-wise sensitivity and a good general signal to noise ration as taught by Gebert (col. 2, lines 60-64).

Regarding claim 8, Gemmer discloses an electromagnetic traffic measurement operatively connected to traffic signals or to a gate control (col. 1, lines 14-18).

Regarding claim 9, the above combination discloses all the limitations in claim 7 and Gebert further discloses an electromagnetic traffic measurement when used to measure or control flow within a car park (col. 5, lines 20-33). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Gebert in Gemmer. Doing so would easily installed the encapsulation tape on top of the loop to secure efficiently the assembly to

preclude damage to the loop wherein users can acquire peace of mind when using this system because not only it is a weather resistant but also a cross-wise sensitivity and a good general signal to noise ration as taught by Gebert (col. 2, lines 60-64).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dahlin et al. (US 6,468,678) discloses conformable magnetic articles-----.

Ceseri (US 4,023,017) discloses an electronic traffic control system.

Edwards (US 4,428,990) discloses a traffic accessory.

Inose et al. (US 3,660,812) discloses a road traffic control system.

Raswant (US 5,330,278) discloses a coordinated traffic signal system for roads.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Previl whose telephone number is 703 305-1028. The examiner can normally be reached on Monday-Thursday. The examiner can also be reached on alternate Fridays.

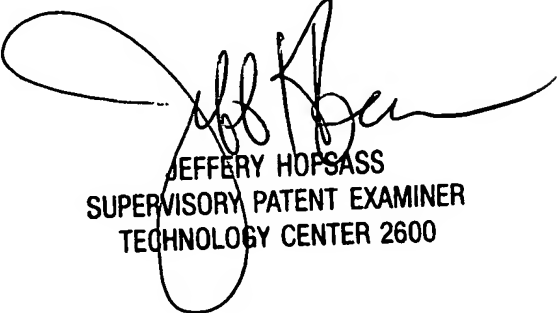
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 703 305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Previl
Examiner
Art Unit 2636

DP
March 17, 2004.



JEFFERY HOPSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600